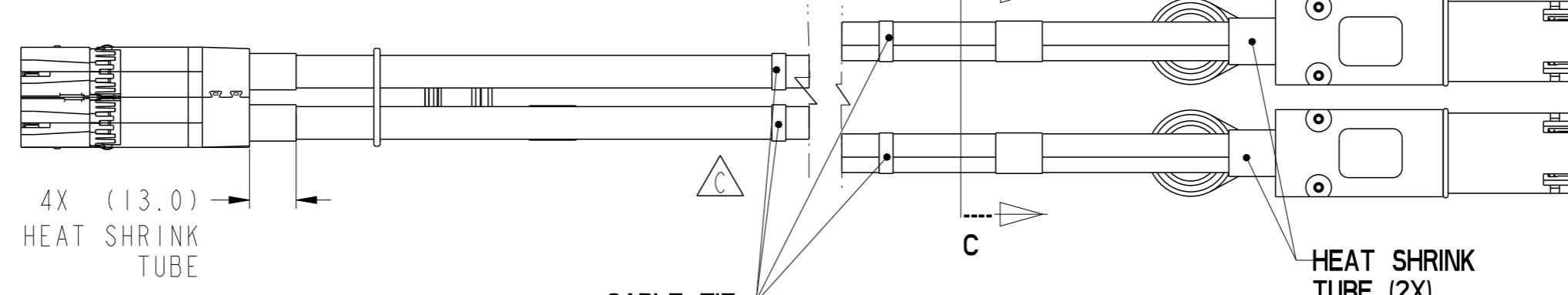


| PRODUCT NUMBER   | DESCRIPTION      | NOTES      |
|------------------|------------------|------------|
| 10117947-XXXXLF  | NON-HF           | SEE SHT. 3 |
| 10117947-XXXXHLF | HALOGEN FREE (H) | SEE SHT. 3 |



CABLE TIE  
COLOR: BLACK  
SEE NOTE 14



**SECTION C-C**  
Mini SAS  
CABLE ORIENTATION ONLY  
END P2 & END P3

|             |                |            |                |                                  |                        |          |               |     |
|-------------|----------------|------------|----------------|----------------------------------|------------------------|----------|---------------|-----|
| dr          | Deborah Ingram | 2011/05/23 | projection     | mm                               | size                   | A3       | scale         | 1:1 |
| eng         | Tommy Lin      | 2013/06/06 |                |                                  | ecn no                 |          | ELX-N-14907-1 |     |
| chr         | -              | -          |                |                                  | rel level              |          | Released      |     |
| appr        | Roger Cheng    | 2013/06/06 | product family | MiniSAS/SATA                     |                        |          |               |     |
|             |                |            | title          | MINI SAS HD 8X TO 2 MINI SAS 2.1 | dwg no                 | 10117947 | rev           | C   |
| www.fci.com |                |            | cat. no.       | -                                | Product - Customer Drw |          | sheet 1 of 5  |     |

| PRODUCT NUMBER   | DESCRIPTION      | NOTES      |
|------------------|------------------|------------|
| 10117947-XXXXLF  | NON-HF           | SEE SHT. 3 |
| 10117947-XXXXHLF | HALOGEN FREE (H) | SEE SHT. 3 |



END P1  
MINI SAS HD 8X  
ISOMETRIC VIEW



END P2 & END P3  
MINI SAS  
ISOMETRIC VIEW



KEY 3 & KEY SLOT 2, 4 & 6  
○ ◇ UNIVERSAL PORT

END P2 & END P3  
MINI SAS

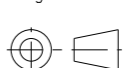

|             |                |            |                |        |  |               |           |          |   |
|-------------|----------------|------------|----------------|--------|--|---------------|-----------|----------|---|
| dr          | Deborah Ingram | 2011/05/23 | projection<br> | mm<br> | size   | A3            | scale     | 4:5      |   |
| eng         | Tommy Lin      | 2013/06/06 |                |        | ecn no   | ELX-N-14907-1 |           |          |   |
| chr         | -              | -          |                |        | product family   | C&A           | rel level | Released |   |
| appr        | Roger Cheng    | 2013/06/06 | title          |        | MINI SAS HD 8X TO 2 MINI SAS 2.1<br>TRAINED UNIVERSAL FINAL ASSEMBLY (6Gb/s) | dwg no        | 10117947  | rev      | C |
| www.fci.com |                | cat. no.   | -              |        | Product - Customer Drw   | sheet 2 of 5  |           |          |   |



| PRODUCT NUMBER   | DESCRIPTION      | NOTES      |
|------------------|------------------|------------|
| 10117947-XXXXLF  | NON-HF           | SEE SHT. 3 |
| 10117947-XXXXHLF | HALOGEN FREE (H) | SEE SHT. 3 |

| PRODUCT NUMBER<br>(NON-HALOGEN FREE) | AWG    | "DIM L"<br>LENGTH<br>(Meters) | "DIM M"<br>HEIGHT<br>(mm) |
|--------------------------------------|--------|-------------------------------|---------------------------|
| 10117947-5020LF                      | 24 AWG | 2 M                           | (20.1)                    |
| 10117947-5030LF                      | 24 AWG | 3 M                           | (20.1)                    |
| 10117947-5040LF                      | 24 AWG | 4 M                           | (20.1)                    |
| 10117947-5050LF                      | 24 AWG | 5 M                           | (20.1)                    |
| 10117947-5060LF                      | 24 AWG | 6 M                           | (20.1)                    |
| 10117947-5070LF                      | 24 AWG | 7 M                           | (20.1)                    |
| 10117947-5080LF                      | 24 AWG | 8 M                           | (20.1)                    |
| 10117947-5090LF                      | 24 AWG | 9 M                           | (20.1)                    |
| 10117947-5100LF                      | 24 AWG | 10 M                          | (20.1)                    |
| 10117947-4020LF                      | 26 AWG | 2 M                           | (20.1)                    |
| 10117947-4030LF                      | 26 AWG | 3 M                           | (20.1)                    |
| 10117947-4040LF                      | 26 AWG | 4 M                           | (20.1)                    |
| 10117947-4050LF                      | 26 AWG | 5 M                           | (20.1)                    |
| 10117947-4060LF                      | 26 AWG | 6 M                           | (20.1)                    |
| 10117947-4070LF                      | 26 AWG | 7 M                           | (20.1)                    |
| 10117947-4080LF                      | 26 AWG | 8 M                           | (20.1)                    |
| 10117947-3010LF                      | 28 AWG | 1 M                           | (17.3)                    |
| 10117947-3020LF                      | 28 AWG | 2 M                           | (17.3)                    |
| 10117947-3030LF                      | 28 AWG | 3 M                           | (17.3)                    |
| 10117947-3040LF                      | 28 AWG | 4 M                           | (17.3)                    |
| 10117947-3050LF                      | 28 AWG | 5 M                           | (17.3)                    |
| 10117947-3060LF                      | 28 AWG | 6 M                           | (17.3)                    |
| 10117947-2005LF                      | 30 AWG | 0.5 M                         | (17.3)                    |
| 10117947-2010LF                      | 30 AWG | 1 M                           | (17.3)                    |
| 10117947-2020LF                      | 30 AWG | 2 M                           | (17.3)                    |
| 10117947-2030LF                      | 30 AWG | 3 M                           | (17.3)                    |
| 10117947-2040LF                      | 30 AWG | 4 M                           | (17.3)                    |

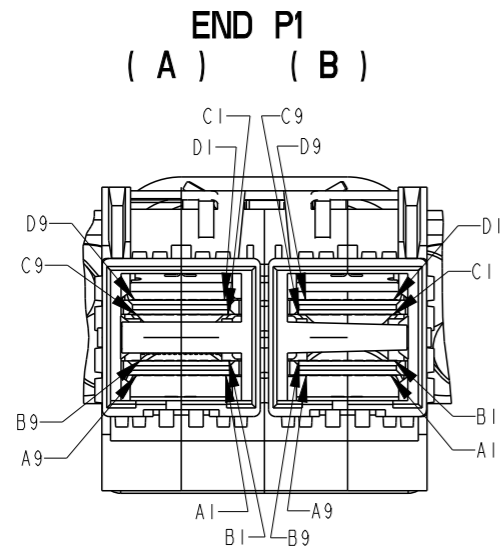
| PRODUCT NUMBER<br>(HALOGEN FREE)<br>SEE NOTE 9 | AWG    | "DIM L"<br>LENGTH<br>(Meters) | "DIM M"<br>HEIGHT<br>(mm) |
|--|--------|-------------------------------|---------------------------|
| 10117947-5020HLF                               | 24 AWG | 2 M                           | (20.1)                    |
| 10117947-5030HLF                               | 24 AWG | 3 M                           | (20.1)                    |
| 10117947-5040HLF                               | 24 AWG | 4 M                           | (20.1)                    |
| 10117947-5050HLF                               | 24 AWG | 5 M                           | (20.1)                    |
| 10117947-5060HLF                               | 24 AWG | 6 M                           | (20.1)                    |
| 10117947-5070HLF                               | 24 AWG | 7 M                           | (20.1)                    |
| 10117947-5080HLF                               | 24 AWG | 8 M                           | (20.1)                    |
| 10117947-5090HLF                               | 24 AWG | 9 M                           | (20.1)                    |
| 10117947-5100HLF                               | 24 AWG | 10 M                          | (20.1)                    |
| 10117947-4020HLF                               | 26 AWG | 2 M                           | (20.1)                    |
| 10117947-4030HLF                               | 26 AWG | 3 M                           | (20.1)                    |
| 10117947-4040HLF                               | 26 AWG | 4 M                           | (20.1)                    |
| 10117947-4045HLF                               | 26 AWG | 5 M                           | (20.1)                    |
| 10117947-4060HLF                               | 26 AWG | 6 M                           | (20.1)                    |
| 10117947-4070HLF                               | 26 AWG | 7 M                           | (20.1)                    |
| 10117947-4080HLF                               | 26 AWG | 8 M                           | (20.1)                    |
| 10117947-3010HLF                               | 28 AWG | 1 M                           | (17.3)                    |
| 10117947-3020HLF                               | 28 AWG | 2 M                           | (17.3)                    |
| 10117947-3030HLF                               | 28 AWG | 3 M                           | (17.3)                    |
| 10117947-3040HLF                               | 28 AWG | 4 M                           | (17.3)                    |
| 10117947-3050HLF                               | 28 AWG | 5 M                           | (17.3)                    |
| 10117947-3060HLF                               | 28 AWG | 6 M                           | (17.3)                    |
| 10117947-2005HLF                               | 30 AWG | 0.5 M                         | (17.3)                    |
| 10117947-2010HLF                               | 30 AWG | 1 M                           | (17.3)                    |
| 10117947-2020HLF                               | 30 AWG | 2 M                           | (17.3)                    |
| 10117947-2030HLF                               | 30 AWG | 3 M                           | (17.3)                    |
| 10117947-2040HLF                               | 30 AWG | 4 M                           | (17.3)                    |

|   |                |  |   |                        |                |               |       |     |
|---|----------------|--|---|------------------------|----------------|---------------|-------|-----|
| dr  | Deborah Ingram | 2011/05/23   |  | mm                     | size           | A3            | scale | 1:1 |
| eng   | Tommy Lin      | 2013/06/06   |   |                        | ecn no         | ELX-N-14907-1 |       |     |
| chr   | -              | -  |   |                        | rel level      | Released      |       |     |
| appr  | Roger Cheng    | 2013/06/06   |   |                        | product family | C&A           |       |     |
|  |                | title MINI SAS HD 8X TO 2 MINI SAS 2.1<br>TRAINED UNIVERSAL FINAL ASSEMBLY (6Gb/s) |   | dwg no 10117947        | rev C          |               |       |     |
| www.fci.com   |                | cat. no.   | -   | Product - Customer Drw |                | sheet 3 of 5  |       |     |



Copyright FCI.

| PRODUCT NUMBER   | DESCRIPTION      | NOTES      |
|------------------|------------------|------------|
| 10117947-XXXXLF  | NON-HF           | SEE SHT. 3 |
| 10117947-XXXXHLF | HALOGEN FREE (H) | SEE SHT. 3 |

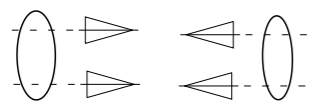


VIEW A  
SCALE: 2:1



VIEW B  
SCALE: 2:1

LEGEND:



HIGH-SPEED SERIAL  
DIFFERENTIAL PAIRS



SIGNAL RETURN



POWER AND MANAGEMENT  
INTERFACE

WIRING LIST (SEE NOTE 7)

| END P1 (B)<br>MINI SAS HD |      | CONDUCTOR #           | END P2<br>(MINI SAS) |        |
|---------------------------|------|-----------------------|----------------------|--------|
| SIGNAL                    | PIN# |                       | PIN#                 | SIGNAL |
| GND                       | A9   | PAIR 2                | B7                   | GND    |
| Rx 1-                     | A5   |                       | B6                   | Tx 1-  |
| Rx 1+                     | A4   |                       | B5                   | Tx 1+  |
| GND                       | A3   | PAIR 4                | B4                   | GND    |
| Rx 3-                     | A8   |                       | B12                  | Tx 3-  |
| Rx 3+                     | A7   |                       | B11                  | Tx 3+  |
| GND                       | A6   |                       | B13                  | GND    |
| N/C                       | A1   | NO THRU<br>CONNECTION |                      |        |
| Interrupt                 | A2   |                       |                      |        |
| GND                       | B9   | PAIR 1                |                      | GND    |
| RX 0-                     | B5   |                       | B3                   | TX 0-  |
| RX 0+                     | B4   |                       | B2                   | TX 0+  |
| GND                       | B3   | PAIR 3                | B1                   | GND    |
| RX 2-                     | B8   |                       | B9                   | TX 2-  |
| RX 2+                     | B7   |                       | B8                   | TX 2+  |
| GND                       | B6   |                       | B10                  | GND    |
| N/C                       | B1   | NO THRU<br>CONNECTION |                      |        |
| Mod_PRS_L<br>(GND)        | B2   |                       |                      |        |
| GND                       | C9   |                       | A7                   | GND    |
| TX 1-                     | C5   | PAIR 2                | A6                   | RX 1-  |
| TX 1+                     | C4   |                       | A5                   | RX 1+  |
| GND                       | C3   |                       | A4                   | GND    |
| TX 3-                     | C8   | PAIR 4                | A12                  | RX 3-  |
| TX 3+                     | C7   |                       | A11                  | RX 3+  |
| GND                       | C6   |                       | A13                  | GND    |
| SCL                       | C1   | NO THRU<br>CONNECTION |                      |        |
| SDA                       | C2   |                       |                      |        |
| GND                       | D9   |                       |                      | GND    |
| TX 0-                     | D5   | PAIR 1                | A3                   | RX 0-  |
| TX 0+                     | D4   |                       | A2                   | RX 0+  |
| GND                       | D3   |                       | A1                   | GND    |
| TX 2-                     | D8   | PAIR 3                | A9                   | RX 2-  |
| TX 2+                     | D7   |                       | A8                   | RX 2+  |
| GND                       | D6   |                       | A10                  | GND    |
| N/C                       | D1   | NO THRU<br>CONNECTION |                      |        |
| V+3.3 for<br>EEPROM       | D2   |                       |                      |        |
| SHELL                     |      | BRAID                 |                      | SHELL  |

SHIELD-----SHIELD

WIRING LIST (SEE NOTE 7)

| END P1 (A)<br>MINI SAS HD |      | CONDUCTOR #           | END P3<br>(MINI SAS) |        |
|---------------------------|------|-----------------------|----------------------|--------|
| SIGNAL                    | PIN# |                       | PIN#                 | SIGNAL |
| GND                       | A9   | PAIR 2                | B7                   | GND    |
| Rx 1-                     | A5   |                       | B6                   | Tx 1-  |
| Rx 1+                     | A4   |                       | B5                   | Tx 1+  |
| GND                       | A3   | PAIR 4                | B4                   | GND    |
| Rx 3-                     | A8   |                       | B12                  | Tx 3-  |
| Rx 3+                     | A7   |                       | B11                  | Tx 3+  |
| GND                       | A6   |                       | B13                  | GND    |
| N/C                       | A1   | NO THRU<br>CONNECTION |                      |        |
| Interrupt                 | A2   |                       |                      |        |
| GND                       | B9   | PAIR 1                |                      | GND    |
| RX 0-                     | B5   |                       | B3                   | TX 0-  |
| RX 0+                     | B4   |                       | B2                   | TX 0+  |
| GND                       | B3   | PAIR 3                | B1                   | GND    |
| RX 2-                     | B8   |                       | B9                   | TX 2-  |
| RX 2+                     | B7   |                       | B8                   | TX 2+  |
| GND                       | B6   |                       | B10                  | GND    |
| N/C                       | B1   | NO THRU<br>CONNECTION |                      |        |
| Mod_PRS_L<br>(GND)        | B2   |                       |                      |        |
| GND                       | C9   |                       | A7                   | GND    |
| TX 1-                     | C5   | PAIR 2                | A6                   | RX 1-  |
| TX 1+                     | C4   |                       | A5                   | RX 1+  |
| GND                       | C3   |                       | A4                   | GND    |
| TX 3-                     | C8   | PAIR 4                | A12                  | RX 3-  |
| TX 3+                     | C7   |                       | A11                  | RX 3+  |
| GND                       | C6   |                       | A13                  | GND    |
| SCL                       | C1   | NO THRU<br>CONNECTION |                      |        |
| SDA                       | C2   |                       |                      |        |
| GND                       | D9   |                       |                      | GND    |
| TX 0-                     | D5   | PAIR 1                | A3                   | RX 0-  |
| TX 0+                     | D4   |                       | A2                   | RX 0+  |
| GND                       | D3   |                       | A1                   | GND    |
| TX 2-                     | D8   | PAIR 3                | A9                   | RX 2-  |
| TX 2+                     | D7   |                       | A8                   | RX 2+  |
| GND                       | D6   |                       | A10                  | GND    |
| N/C                       | D1   | NO THRU<br>CONNECTION |                      |        |
| V+3.3 for<br>EEPROM       | D2   |                       |                      |        |
| SHELL                     |      | BRAID                 |                      | SHELL  |

SHIELD-----SHIELD

|             |                |            |                                  |     |                        |               |              |          |
|-------------|----------------|------------|----------------------------------|-----|------------------------|---------------|--------------|----------|
| dr          | Deborah Ingram | 2011/05/23 | projection                       | mm  | size                   | A3            | scale        | 1:2      |
| eng         | Tommy Lin      | 2013/06/06 |                                  |     | ecn no                 | ELX-N-14907-1 | rel level    | Released |
| chr         | -              | -          |                                  |     |                        |               |              |          |
| appr        | Roger Cheng    | 2013/06/06 | product family                   | C&A |                        |               |              |          |
|             |                |            | MINI SAS HD 8X TO 2 MINI SAS 2.1 |     | dwg no                 |               | 10117947     |          |
| www.fci.com |                |            | cat. no.                         |     | Product - Customer Drw |               | sheet 4 of 5 |          |

| PRODUCT NUMBER   | DESCRIPTION      | NOTES      |
|------------------|------------------|------------|
| 10117947-XXXXLF  | NON-HF           | SEE SHT. 3 |
| 10117947-XXXXHLF | HALOGEN FREE (H) | SEE SHT. 3 |

NOTES:

- MATERIALS MINI SAS HD (END P1)  
 BACK SHELLS: ZINC DIE CAST/ COPPER UNDER PLATE/NICKEL OVER PLATE  
 PULL TAB: THERMOPLASTIC POLYMER  
 LATCH: STAINLESS STEEL  
 FERRULE: BRASS  
 EMI GASKETS: STAINLESS STEEL  
 LOCTITE  
 HEAT SHRINK: HIGH POLYMER  
 PADDLE CARD: PRINTED CIRCUIT SUBSTRATE

- MATERIALS MINI SAS (END P2 & END P3)  
 BACK SHELLS: ZINC DIE CAST  
 PULL TAB: THERMOPLASTIC POLYMER  
 LATCH: STAINLESS STEEL  
 JET MELT: POLYAMIDE POLYMER  
 HEAT SHRINK: POLYOLEFIN  
 PADDLE CARD: PRINTED CIRCUIT SUBSTRATE

- ELECTRICAL PERFORMANCE PER CURRENT REVISION: T10/SAS-2.1
- THIS PRODUCT MEETS THE RESTRICTION OF HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT (RoHS) DIRECTIVE (2002/95/EC)
- PRODUCT SPECIFICATIONS: Mini SAS HD GS-12-65I, MINI SAS 2.1 GS-12-548

- UNLESS OTHERWISE SPECIFIED ASSEMBLED LENGTH TOLERANCE IS TO BE:  
 "DIM L" < 1 METERS = ±25mm  
 "DIM L" 1 METER TO 10 METER = 2% OF "DIM L"

- LABEL DETAILS:

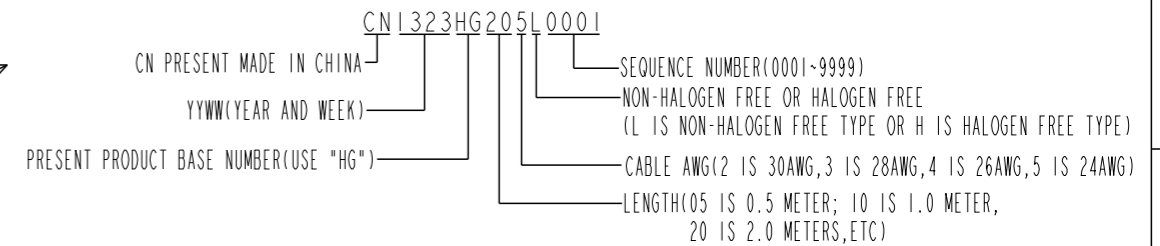
FCI CHINA  
 FCI P/N  
 FCI REVISION  
 FCI SERIAL NUMBER

FONT SHALL BE CLEARLY VISIBLE AND BLACK IN COLOR

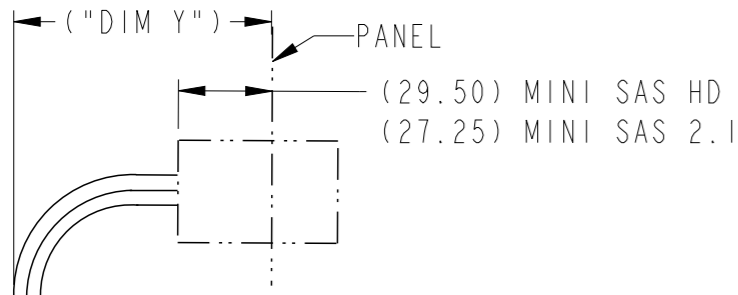
△ LABEL EXAMPLE

FCI CHINA  
 10117947-5020LF  
 Rev.C  
 CN1323HG205L0001

FCI SERIAL NUMBER IS ONLY FOR TRACKING PRODUCT, DEFINED AS BELOW:



- ALL CABLE ASSEMBLIES SHALL BE 100% TESTED FOR CONTINUITY AS DEFINED IN WIRING LIST.
- PACKAGING OF LEAD FREE PRODUCTS MEETS LABELING AND PACKAGING PER SPECIFICATION GS-14-920. PACKAGE CABLE ASSEMBLIES PER GS-14-1272. DUST COVER IS TO BE APPLIED TO MINI SAS HD CONNECTOR PRIOR TO SHIPPING. FCI PACKAGE TRACKING BAG LABEL IS ONLY FOR REFERENCE.
- "H" PRODUCT NUMBERS DESIGNATE THE USE OF HALOGEN FREE RAW CABLE.
- THIS DIMENSION IS A FINISHED PRODUCT LENGTH.
- A "△" SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION. THE CURRENT REVISION WILL BE SHOWN IN THE SYMBOL.
- MEETS ELECTRICAL PERFORMANCE REQUIREMENTS OF SAS 2.1.
- MATES WITH SERIES: MINI SAS HS - 100112627 or 10112628  
 MINI SAS 2.1 - BOARD CONNECTOR 100988870 AND CAGE 10098872
- PLACE A CABLE TIE EVERY 0.5 METERS ON ASSEMBLIES. IN THE CASE OF A 0.5 METER CABLE LENGTH, PLACE THE CABLE TIE MIDWAY BETWEEN CONNECTORS.



PEND RADIUS  
 TOP VIEW OF CONNECTOR

MINI SAS HD P1  
 MINIMUM CABLE BEND TABLE

| CABLE  | ("DIM Y")<br>HF | ("DIM Y")<br>NON-HF |
|--------|-----------------|---------------------|
| 24 AWG | 101.1           | 100.6               |
| 26 AWG | 100.0           | 99.7                |
| 28 AWG | 99.1            | 98.7                |
| 30 AWG | 98.5            | 97.9                |

MINI SAS 2.1 P2 & P3  
 MINIMUM CABLE BEND TABLE  
 PER CONNECTOR

| CABLE  | ("DIM Y")<br>HF | ("DIM Y")<br>NON-HF |
|--------|-----------------|---------------------|
| 24 AWG | 90.6            | 88.3                |
| 26 AWG | 85.3            | 82.9                |
| 28 AWG | 79.3            | 76.9                |
| 30 AWG | 75.7            | 72.1                |

|                |                |            |  |                    |                        |
|----------------|----------------|------------|--|--------------------|------------------------|
| dr             | Deborah Ingram | 2011/05/23 | projection<br>   | size<br>A3         | scale<br>1:1           |
| eng            | Tommy Lin      | 2013/06/06 |  |                    |                        |
| chr            | -              | -          |  |                    |                        |
| appr           | Roger Cheng    | 2013/06/06 |  |                    |                        |
| product family |                |            | -  | ecn no             | ELX-N-14907-1          |
| rel level      |                |            | -  | Released           |                        |
|                |                |            | MINI SAS HD 8X TO 2 MINI SAS 2.1<br>TRAINED UNIVERSAL FINAL ASSEMBLY (6Gb/s) | dwg no<br>10117947 | rev<br>C               |
| www.fci.com    |                |            | cat. no.   | -                  | Product - Customer Drw |
|                |                |            | sheet 5 of 5   |                    |                        |



## Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

### Наши контакты:

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